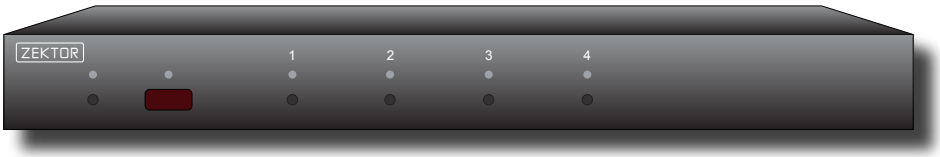
ZEKTOR

Home Theater Switches

Digital Video / Component Video / Multichannel Audio

HDS4.1



High Definition Component Video Switch

Rev 2

02/22/2006

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What's Inside

Thank you for your purchase of your HDS4.1 High Definition Component Video Switch.

Every care has been taken to assure you of a successful installation and subsequent operations of your new HDS4.1 video switch, however should something go wrong, and warranty repair work is needed, we request that you hold on to the original packaging materials.

Please take this time to verify the contents of the HDS4.1 box.

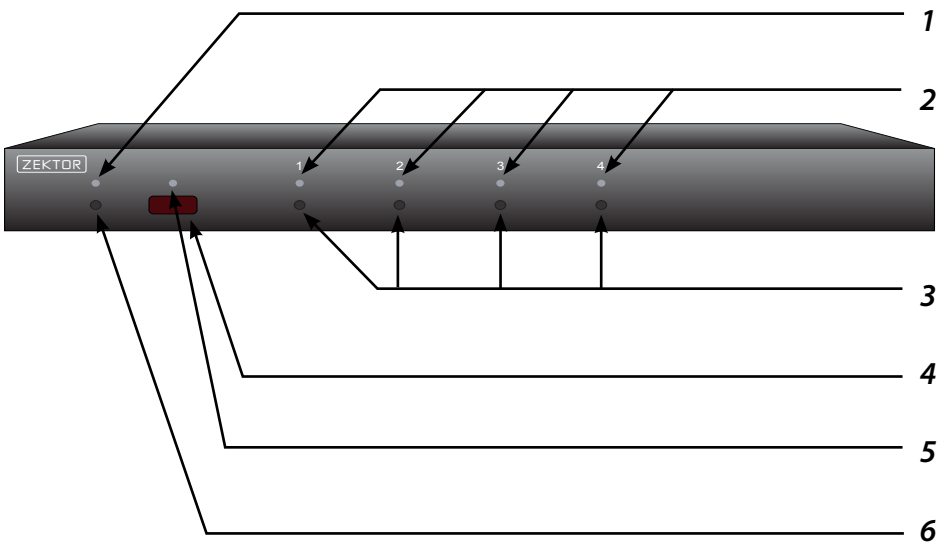
The following should be included:

1. HDS4.1
2. Power Supply Module
3. This User's Manual

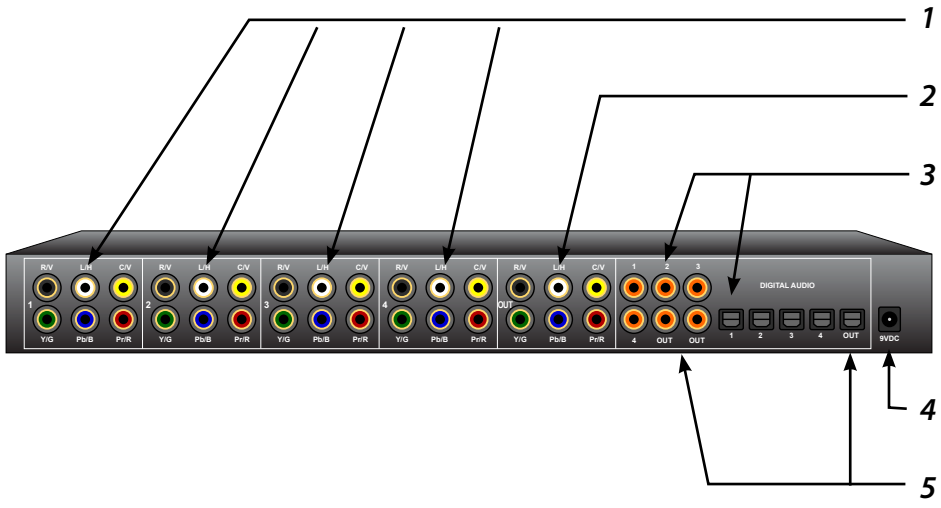
If anything is missing please get in touch with us as soon as possible so that we can correct the situation.

An Overview of the HDS4.1

Front Panel



Rear Panel



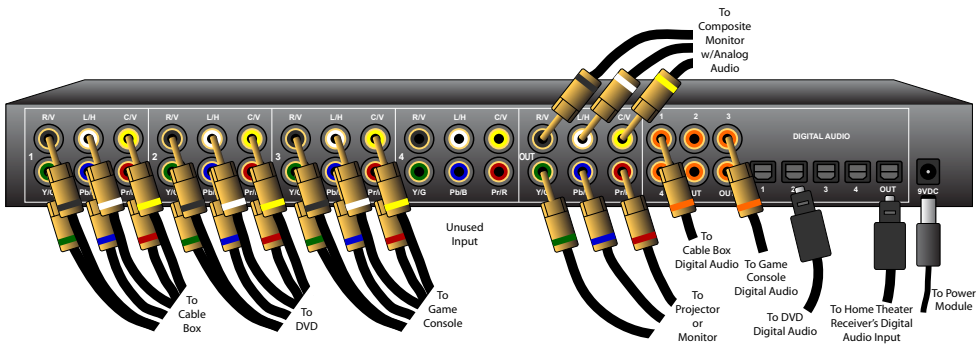
Front Panel Controls:

1. Power Indicator. Lights up in standby mode.
2. Selection LEDs. Indicate currently selected inputs.
3. Input Selection Buttons.
4. Infrared Remote Sensor Window.
5. Infrared Received Indicator. Flashes when IR is received.
6. Power Toggle Button.

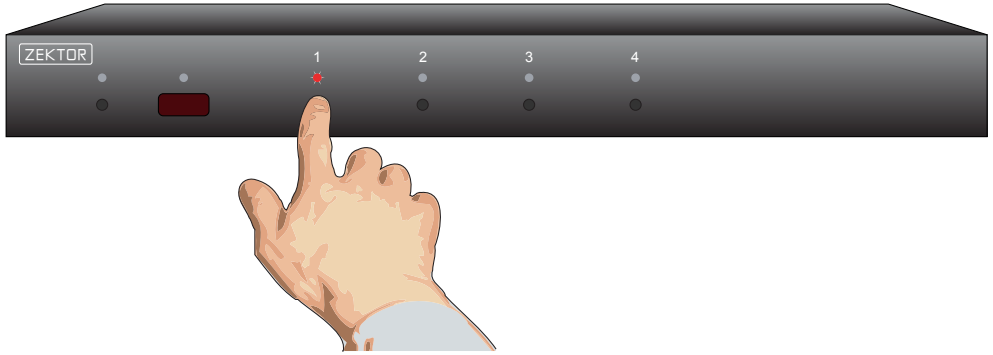
Rear Panel Connections:

1. Analog Inputs. Each input consists of six equivalent channels. The channels are colored and labeled for convenience, however all six channels are of equivalent bandwidth and functionality, and may be interchanged as desired.
2. Analog Outputs.
3. Digital Audio Inputs. Each input has an associated digital audio channel with both a Coax and an Optical connection. Only one of the two types of inputs can be active at any time. The HDS4.1 will auto-select between the two types of signals. If a signal is supplied to both the Coax and Optical inputs, the Coax signal is given priority.
4. DC Power Jack Connector. Plug in the supplied power adapter into this jack.
5. Digital Audio Outputs. All digital audio inputs are automatically converted to both Coax and Optical outputs. All three outputs are available at all times, and are all individually buffered to allow driving three different digital audio devices simultaneously.

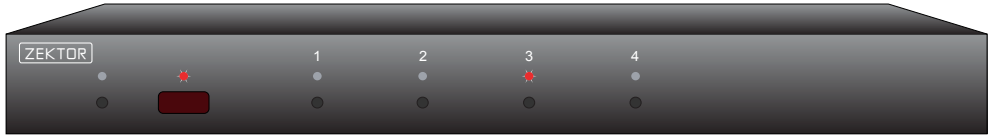
Step 1: Make the appropriate connections.



Step 2: Press buttons to select an input.



Step 3: Or use nearly *ANY* remote to select an input.



Turn to the next chapter for simple instructions on how to setup the HDS4.1 for use with any existing remote!

Easy, Simple, Instructions!

Step 1...

- Use the analog input connections to switch component video / composite video / analog audio or any combination of the above signals to the HDS4.1's analog output connectors. Use the digital audio connectors to switch digital audio signals, with full format conversion between the optical and coax digital audio formats.
- Plug the power module into the HDS4.1, and plug the module into a standard A.C. wall receptacle. The standby LED will light up.

Step 2...

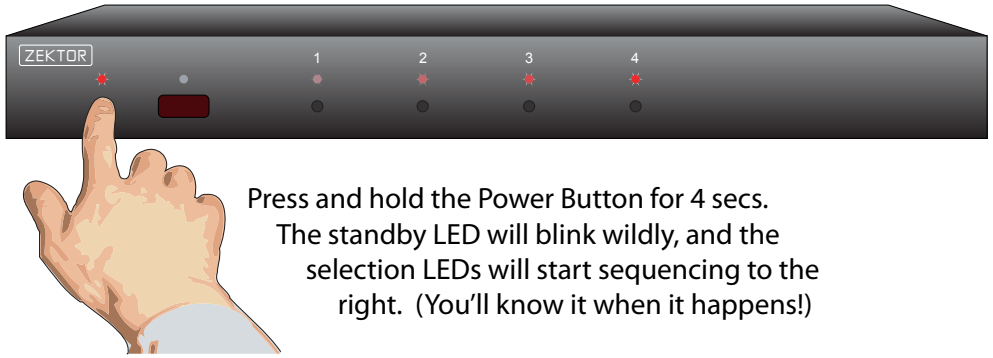
- To switch between any of the four inputs, simply press the button for the desired input. If the HDS4.1 is in the standby, it will turn on. The HDS4.1 will then switch to the selected input, and the associated LED will light to indicate this.
- To place the HDS4.1 back into the standby mode, press and release the Power Toggle button. The channel LEDs will all go blank, and the standby LED will light up. Press the Power Toggle button again to re-select the previously selected input.

Step 3...

- *Use nearly any remote to control your HDS4.1!*
- Using any remote to operate the HDS4.1 is a simple matter of pairing up the HDS4.1 with the remote. The remote doesn't have to be a universal remote (although it can be), any remote from an old TV or VCR will work just fine.
- Using Zektor's exclusive Intelligent-IR™, setup is easy! The HDS4.1 does all the work!

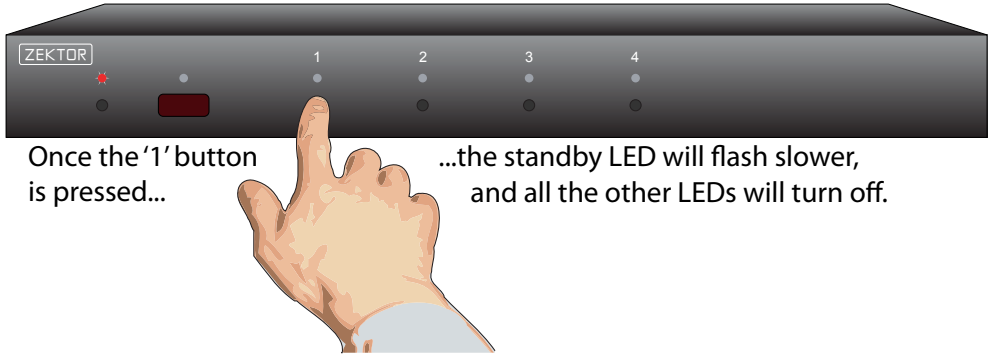
Turn to the next chapter for simple instructions on how to pair up the HDS4.1 with any remote!

Step 1: Put the HDS4.1 into the Setup Mode



Press and hold the Power Button for 4 secs. The standby LED will blink wildly, and the selection LEDs will start sequencing to the right. (You'll know it when it happens!)

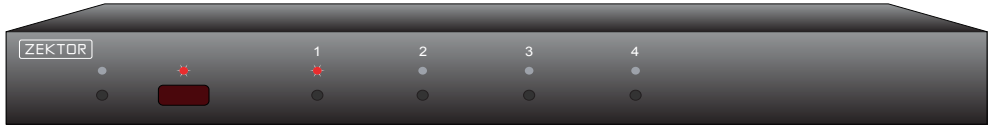
Step 2: Press the '1' button for Intelligent-IR™ learning



Once the '1' button is pressed...

...the standby LED will flash slower, and all the other LEDs will turn off.

Step 3: Teach the HDS4.1 its new IR codes



Press the following sequence of buttons on your remote control:

Power 1 2 3 4 8 9

That's it! The HDS4.1 now operates with your new remote control!

Three Simple Steps to a Remote!

The HDS4.1 features Zektor's Exclusive Intelligent-IR™, and with very few exceptions can be setup to use any remote you can point at it!

Pick a remote, any remote!

- Start by picking the remote you'd like to use with the HDS4.1. If the remote you plan on using is not programmable (for instance, from an old TV), skip the next step.
- If you plan on using a universal remote, start by setting it up as a remote for a TV or VCR that you do not own. (For instance if you don't own a Sony TV, setup your universal remote to control a Sony TV.)

Step 1: Put the HDS4.1 into the Setup Mode

- The HDS4.1 is placed into the setup mode by pressing and holding the Power button for about 4 seconds.

Step 2: Select the Intelligent-IR™ Learn Mode

- There are many options available in the setup mode, but for now all we're interested in is the Intelligent-IR™ learning mode. This is selected by pressing the '1' button.
- Once the '1' button is pressed, the standby LED will flash slower and all the other LEDs will turn off. The HDS4.1 is now waiting for new IR codes to be sent from your remote control.

Step 3: Teach the HDS4.1 your new remote control codes

- On your remote control, press the following buttons, in the following order:

  Power 1 2 3 4 8 9

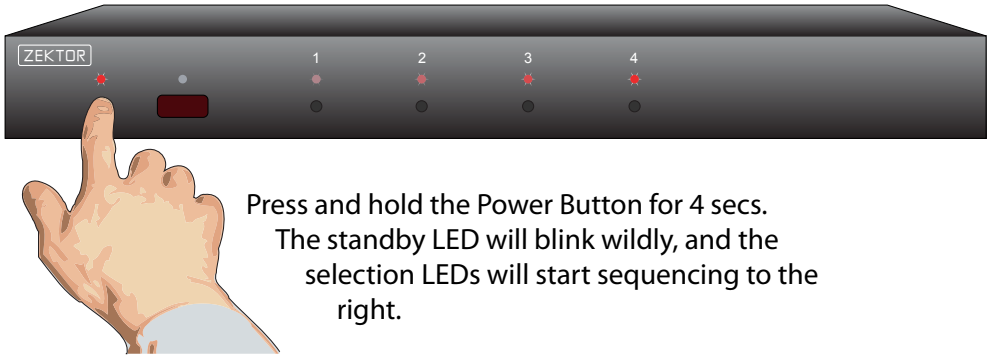
- That's it! The HDS4.1 will return to the state it was in before setup, and will now work with your new remote!

The new control buttons on your remote are...

Power	Toggles the HDS4.1's power.
1 - 4	Selects inputs 1 through 4.
8	Turns on the HDS4.1 (Discrete ON)
9	Turns off the HDS4.1 (Discrete OFF).

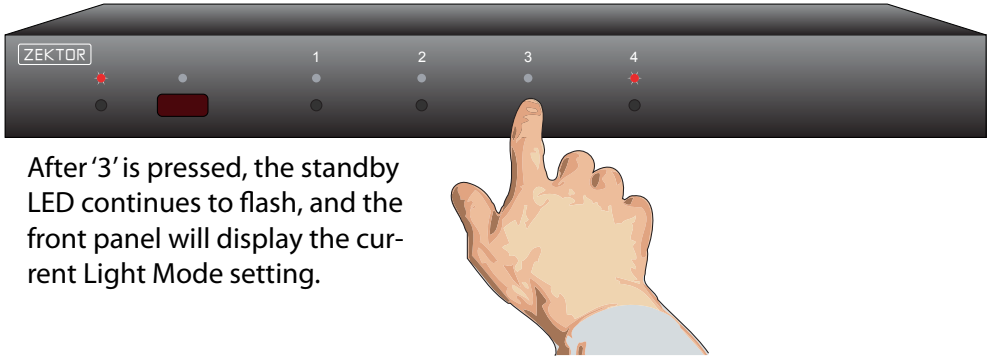
Note: All remote control codes are saved in non-volatile memory and will not be lost during a power failure.

Step 1: Place the HDS4.1 into the Setup Mode



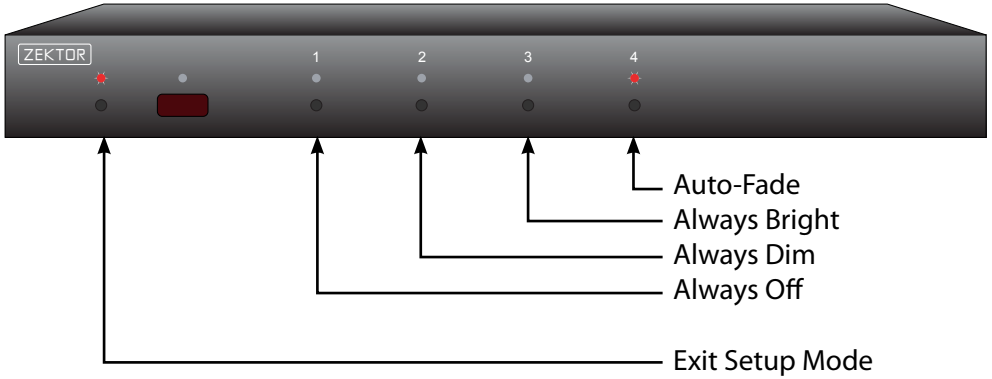
Press and hold the Power Button for 4 secs. The standby LED will blink wildly, and the selection LEDs will start sequencing to the right.

Step 2: Select "Lighting Mode" option



After '3' is pressed, the standby LED continues to flash, and the front panel will display the current Light Mode setting.

Step 3: Choose a new lighting mode



Controlling the Front Panel Lights

There are four different front panel light modes available on the HDS4.1. They are:

- Front panel lights automatically fade from bright to dim after 4 seconds of inactivity.
- Front panel lights are always at the bright level.
- Front panel lights are always at the dim level.
- Front panel lights are turned off.

Note: The intensities of the both the bright and dim levels can be adjusted as well, this is explained in the next chapter.

To change the front panel lighting mode...

Step 1: Enter the Setup Mode

- The HDS4.1 is placed into the setup mode by pressing and holding the Power button for about 4 seconds.

Step 2: Select the Lighting Mode option

- Press the '3' button to select the "Lighting Mode" option.
- The front panel selection LEDs now indicate the currently selected light mode as follows:

  If '1' is lit, then front panel lights are always off.

  If '2' is lit, then front panel lights are always dim.

  If '3' is lit, then front panel lights are always bright.

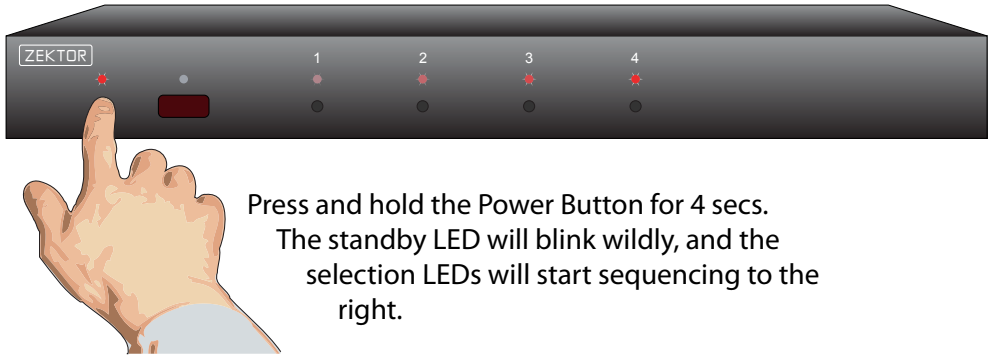
  If '4' is lit, then front panel lights auto-fade from bright to dim after 4 seconds of inactivity.

Step 3: Choose a new lighting mode

- Choose a new light control mode by pressing the associated selection button.
- Press the Power Button to save the new mode and return to normal operations.

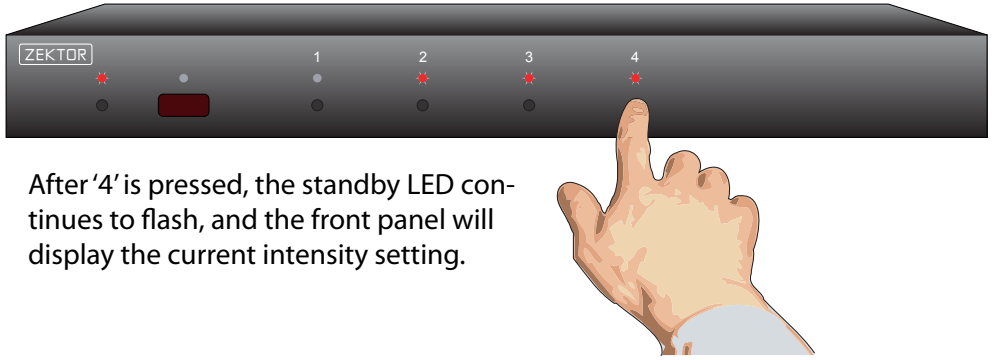
Note: The lighting mode setting is saved in non-volatile memory and is not affected by a power failure.

Step 1: Place the HDS4.1 into the Setup Mode



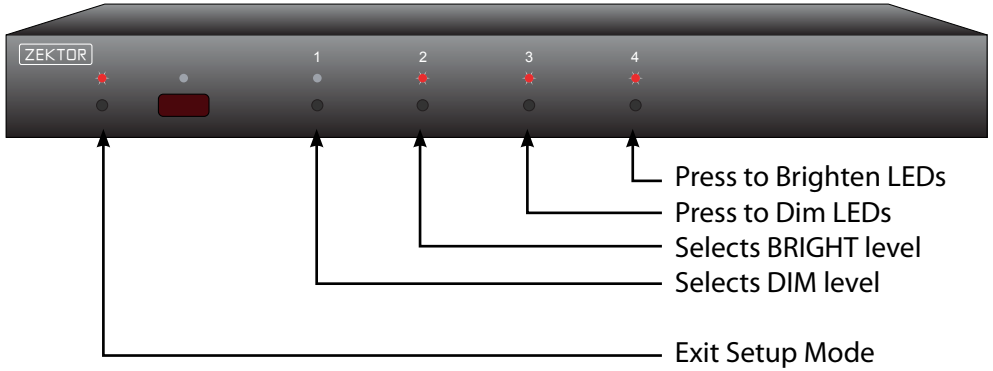
Press and hold the Power Button for 4 secs. The standby LED will blink wildly, and the selection LEDs will start sequencing to the right.

Step 2: Select "Front Panel Intensity" option



After '4' is pressed, the standby LED continues to flash, and the front panel will display the current intensity setting.

Step 3: Adjust front panel intensities



Adjusting the Front Panel Intensity

The bright and dim levels of the front panel lights of the HDS4.1 are user adjustable, allowing the HDS4.1 to blend into a wide range of lighting conditions.

To change the front panel intensities...

Step 1: Enter the Setup Mode

- The HDS4.1 is placed into the setup mode by pressing and holding the Power button for about 4 seconds.

Step 2: Select the Front Panel Intensity option

- Press the '4' button to select "Front Panel Intensity" option.
- The front panel selection LEDs now indicate the front panel intensity settings:

  If '1' is lit, then the DIM level is being adjusted.

  If '2' is lit, then the BRIGHT level being adjusted.

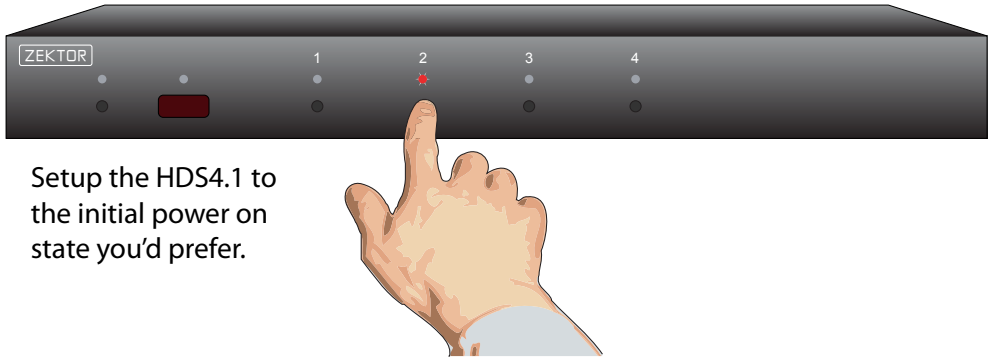
  '3' and '4' are always lit.

Step 3: Adjust Front Panel Intensities

- Use the '1' and '2' buttons to switch between the DIM and BRIGHT settings.
- Use the '3' button to decrease the intensity of the front panel lights.
- Use the '4' button to increase the intensity of the front panel lights.
- You cannot make the DIM level brighter than the BRIGHT level, and you cannot make the BRIGHT level dimmer than the DIM level.
- Once the front panel intensities are acceptable, press the Power button to save the new settings and exit the setup mode.

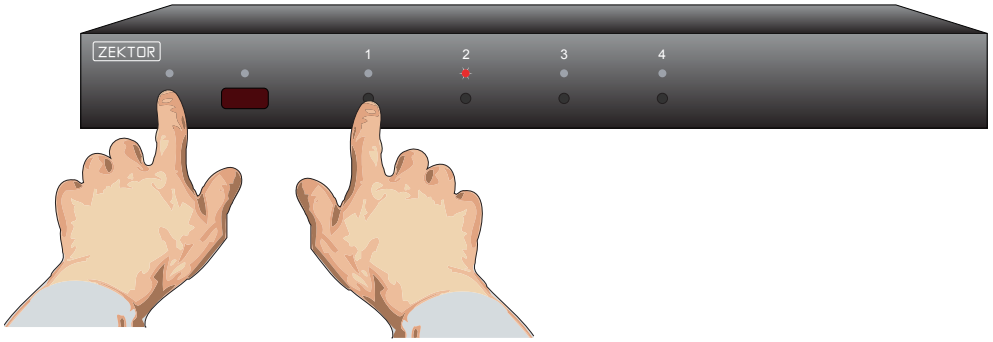
Note: The new intensity settings are saved in non-volatile memory and are not affected by a power failure.

Step 1: Set the HDS4.1 to the preferred initial power on state



Setup the HDS4.1 to the initial power on state you'd prefer.

Step 2: Save the new initial power on state



1. Start by pressing and holding the Power button...

2. ...while continuing to hold the Power button, press and hold the '1' button.

3. After about 4 seconds, the display will flash indicating the new power on state has been accepted.

Setting the Initial Power On State

As long as the HDS4.1 is plugged in, it will remember the previously selected input in standby mode. When powered up by pressing the Power button, it will return to that previously selected channel.

However, if power is removed (for instance a plug strip used to power the HDS4.1 is turned off), and then re-applied, the HDS4.1's default behavior is to enter into the standby mode.

It is possible to change the power on behavior of the HDS4.1.

To change the power on defaults...

Step 1: Setup the HDS4.1 to your preferred power on state.

- Use the front panel buttons to setup the HDS4.1 to the operating settings you'd like at initial power up.

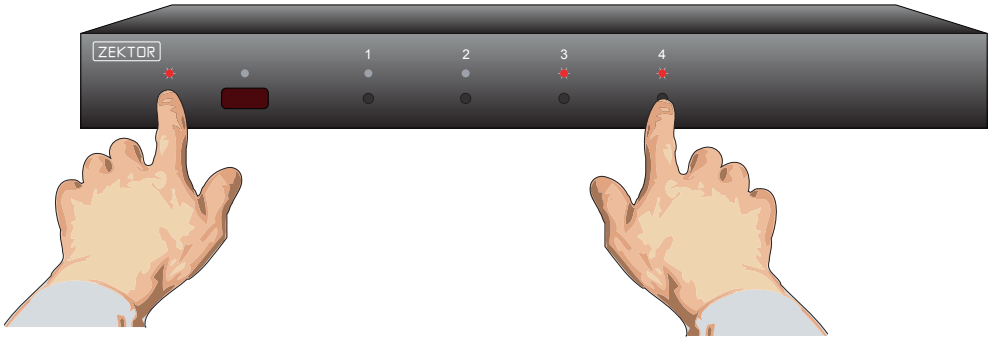
Step 2: Save the new initial power on state.

1. First press and hold the Power button.
2. While continuing to hold the Power button, press and hold the '1' button.
3. After holding both buttons for about '4' seconds, the display will blink indicating the new power on defaults have been accepted.

Test the new initial power on state

- You can test the new defaults by either disconnecting the power supply from the back of the HDS4.1 or by unplugging the power supply from the wall.
- Reconnect power. The HDS4.1 will power up into your new power on default state.

Step 1: Enter the Enable / Disable Control State

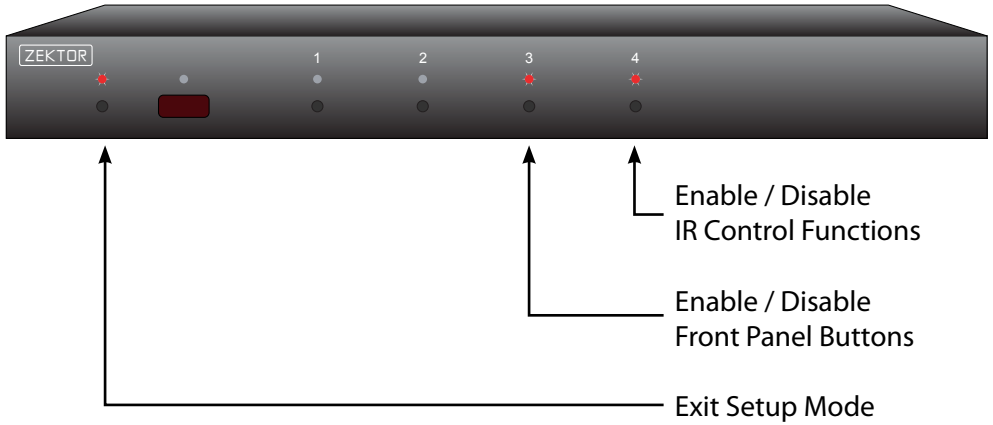


1. Start by pressing and holding the Power button...

2. ...while continuing to hold the Power button, press and hold the '4' button.

3. After about 4 seconds, the standby LED will flash quickly, and the display will indicate the current enable / disable statuses.

Step 2: Enable or Disable Front Panel and / or IR Control Functions



Disabling Front Panel or Remote

If you are not planning on using a remote control with your HDS4.1, you might want to disable its remote control function.

Or if you have a household with young curious fingers that likes playing with buttons, you also have the capability of disabling the front panel switches and only operating the HDS4.1 with a remote.

To enable/disable the front panel switches or remote capabilities...

Step 1: Enter the Enable / Disable control state

1. First press and hold the Power button
2. While continuing to hold the Power Button, press and hold the '4' button.
3. After holding both buttons for about '4' seconds, the stand-by LED will start flashing quickly indicating you are now able to enable / disable front panel buttons and IR control functions.

- The front panel selection LEDs now indicate the state of the front panel and IR control settings:

  If '3' is lit, then the Front Panel buttons are ENABLED.

  If '4' is lit, then the IR remote functions are ENABLED.

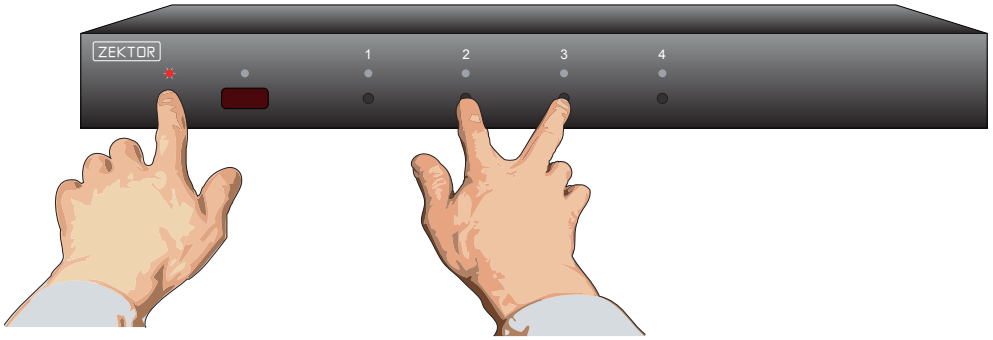
Step 2: Enable or Disable Front Panel and / or IR control

- Use the '3' button to ENABLE / DISABLE the front panel buttons.
- Use the '4' button to ENABLE / DISABLE the IR remote control functions.
- When finished, press the 'Power' button to save new settings and return to normal operations.

Note 1: The HDS4.1 will not allow you to disable both the front panel and IR controls at the same time.

Note 2: Disabling the front panel buttons does not disable the ability to enter the Setup Modes. Even with the front panel disabled you can perform the above steps, allowing you to once again enable the front panel buttons.

Step 1: Reset All Parameters to Factory Defaults



1 Start by pressing and holding the Power button...

2 ...while continuing to hold the Power button, press and hold both the '2' and the '3' buttons.

3 After about 4 seconds, the display will flash indicating all parameters have been restored to their factory programmed values.

Resetting to Factory Defaults

If, for whatever reason, you'd like to reset your HDS4.1 back to its factory condition, this is easily done...

Step 1: Reset All Parameters to Factory Defaults

1. First press and hold the Power button
2. While continuing to hold the Power Button, press and hold both the '2' and '3' buttons.
3. After holding all buttons for about '4' seconds, the display will flash indicating all parameters have been restored to their factory programmed values.

Specifications

Specifications:

Analog Channels	
Bandwidth @ -0.1db:	0Hz - 70MHz, All channels
Bandwidth @ -3db:	Greater than 200MHz, All channels
Resolution:	480i - 1080p, All HDTV modes
Input Coupling:	D.C.
Output Coupling:	D.C.
Digital Audio Channels	
Inputs:	4 Coax, 4 Optical, (Auto conversion between formats)
Outputs:	2 Coax, 1 Optical, (Simultaneous)
Maximum Transfer Rate:	13.2Mb/S
Digital Audio Modes:	PCM, DD5.1, DTS, All modes
Coax Input Level Range:	200mV - 7.0V (PC Soundcard Compatible)
Coax Output Level:	500mV Nominal
Power Requirements:	90-120VAC, 60Hz, 15W
Optional International:	90-264VAC, 47-63Hz, 15W
Power Supply:	Wall Mount, 9V @ 500ma, U.L. Listed
Dimensions:	Rack Mountable, 17”W x 6.5”D x 1.75”H
Warranty:	**Two Year Parts and Labor**

Warranty Policy

Warranty Policy

ZEKTOR warrants this product against defects in material and workmanship under normal use and service for two years from the original date of purchase. ZEKTOR, at its option, shall repair or replace the defective unit covered by this warranty.

In order to keep this warranty in effect, the product must have been handled and used as prescribed in the instructions accompanying this warranty. This warranty does not cover any damage due to accident, misuse, abuse, or negligence. This warranty is valid only if the product is used as specified in the product documentation.

Repair or replacement, as provided under this warranty, is your exclusive remedy. ZEKTOR shall not be liable for any incidental or consequential damages. Implied warranties of merchantability and fitness for a particular purpose on this product are limited in duration to the duration of this warranty.

Some states/countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states/countries do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state and country to country.

Return & Exchange

Shipment of product is as advertised by product. Upon receipt of merchandise inspect product carefully, should you find that the product does not meet your expectations, or satisfaction, contact us at once and tell us your concerns, so we may make every effort to satisfy your purchase.

Contact Information

Instructions for Returning Items

Please retain the dated sales receipt as evidence of the date of purchase. You will need it for any warranty service. If you bought the product through a dealer, installer, or reseller, you will need to return the product to the point of sale.

E-mail us, or call us, using the information listed under "Customer Service Contact Information", for a Return to Manufacturer Authorization (RMA) number. Describe briefly the reasons for your requested return.

You must receive an RMA # before you return any goods to us. The RMA # must appear on your return packing label or on the outside of the box. Merchandise without a RMA # will be refused. RMA's are valid for twenty (20) days from date of issuance.

All returned merchandise must be shipped in the original packaging. If it is not in the original packaging, ZEKTOR will not be held liable for damage during shipment. Shipments of returns must be prepaid, and we will not accept COD returns.

Customer Service Contact Information:

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